

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A method to release a Label Switched Path established between linked routers of a telecommunication network via a Path_Tear Message, the method comprising:

linking said routers in cascade according to a main path; ;

linking said routers in another order according to at least one detour path; and

releasing at least some of the linked routers via said Path_Tear Message,

wherein said Path_Tear Message comprises a tag indicating, to the router receiving said Path_Tear Message, which of Label Switched Paths available to the receiving router are to be released.

2. (previously presented): The release method according to claim 1, wherein said Path_Tear Message is received, in the receiving router, via said detour path linking an upstream-located router to said receiving router.

3. (previously presented): The release method according to claim 1, wherein said tag further indicates through which of said main path or said detour path or both, starting from the receiving router, said Path_Tear Message should be forwarded towards said downstream-located router.

4. (previously presented): The release method according to claim 1, wherein said releasing comprises releasing the Label Switched Paths arriving at a receiving router from upstream-located routers via said main path and via said detour path linking said upstream-located routers and said receiving router.

5. (currently amended): A method to release a Label Switched Path established between linked routers of a telecommunication network via a Path_Tear Message, the method comprising:

linking said routers in cascade according to a main path;

linking said routers in another order according to at least one detour path; and

~~relating~~ releasing at least some of the linked routers via said Path_Tear Message,

wherein said Path_Tear Message comprises a tag indicating which of Label Switched Paths to release and wherein said releasing comprises releasing each Label Switched Path indicated by said tag.

6. (previously presented): The release method according to claim 5, wherein said tag is a Sender Template.

7. (previously presented): A telecommunication network comprising:
a plurality of routers; and
a plurality of links interconnecting the plurality of routers, where Label Switched Paths are established using said plurality of links,

wherein said routers are linked in cascade according to a main path and are linked in another order according to at least one detour path,

wherein said routers transmit a Path_Tear Message towards downstream-located routers, said Path_Tear Message indicating which Label Switched Paths have to be released,

wherein the router transmitting said Path_Tear Message adds to said Path-Tear Message a tag indicating, to the router receiving said Path_Tear Message, which of the Label Switched Paths available to the receiving router are to be released,

wherein the receiving router detects said tag in said received Path_Tear Message, releases each Label Switched Path indicated by said tag, and, according to said tag, forwards said Path_Tear Message towards said downstream-located router.

8. (previously presented): The telecommunication network according to claim 7, wherein said tag further indicates through which path said Path_Tear Message should be forwarded downstream, and wherein, according to said tag, said receiving router forwards said Path_Tear Message towards said downstream-located router through said Main Path or through said Detour Path or through both without waiting for a timeout.

9. (previously presented): The telecommunication network according to claim 7, wherein said receiving router is adapted to release the Label Switched Paths arriving at said receiving router from upstream-located routers via said main path and via said detour path linking said upstream-located routers and said receiving router.

10. (previously presented): The telecommunication network according to claim 7, wherein said tag further indicates to the receiving router which of said Label Switched Paths (LSPs) comprising a main path and at least one detour path are to be released, and wherein said receiving router releases each Label Switched Path indicated by said tag without waiting for a timeout.

11. (previously presented): The telecommunication network according to claim 7, wherein said receiving router transmits, towards a downstream-located router, a Reserved_Tear Message including said tag,

wherein said downstream-located router transmits said Reserved_Tear Message towards a downstream-located router, and

wherein said downstream-located router immediately generates a Path_Tear Message including said tag, and forwards said Path_Tear Message towards another downstream-located router without waiting for a timeout.

12. (previously presented): The telecommunication network according to claim 7, wherein both said main path and at least one detour path arrive at said receiving router.

13. (previously presented): The telecommunication network according to claim 7, wherein said telecommunication network is a Multi-Protocol Label Switching telecommunication network.

14. (previously presented): The telecommunication network comprising:

the routers;

a plurality of links interconnecting said plurality of routers, where Label Switched Paths are established using said plurality of links,

wherein said routers are linked in cascade according to the main path and are linked in another order according to at least one said detour path,

wherein said routers transmit the Path_Tear Message towards downstream-located routers, said Path_Tear Message indicating that a Label Switched Path has to be released,

wherein the router transmitting said Path_Tear Message adds said tag and said information to said Path_Tear Message, the tag indicating, to the router receiving said Path_Tear Message, whether said Path_Tear Message should be forwarded towards a downstream-located router,

wherein the receiving router detects said tag in said received Path_Tear Message, releases each Label Switched Path indicated by said tag, and, according to said tag, forwards said Path_Tear Message towards said downstream-located router, and

wherein said routers operate according to the release method mentioned in claim 1.

15. (previously presented): The release method according to claim 1, wherein said releasing comprises releasing without waiting for a timeout, each Label Switched Path indicated by said tag.

16. (previously presented): A system for releasing a Label Switched Path established between linked routers of a telecommunication network via a Path_Tear Message, the system comprising:

a plurality of routers;
a plurality of links linking said routers to form a main path and linking said routers in another order to form at least one detour path;
a release module which releases at least some of the linked routers via said Path_Tear Message,

wherein said Path_Tear Message comprises a tag indicating, to the router receiving said Path_Tear Message, whether said Path_Tear Message should be forwarded towards a downstream-located router and indicating which of Label Switched Paths available to the receiving router should be released.

17. (previously presented): The system according to claim 16, wherein the releasing module releases each LSP indicated in the tag without waiting for a timeout.

18. (previously presented): The release method according to claim 1, wherein the tag indicates which paths out of the main path and the detour path and wherein the Path_Tear Message is received only via one of the main path and the detour path and is forwarded downstream without waiting for a timeout.

19. (previously presented): The release method according to claim 1, wherein a receiving router is linked to other routers via the main path and via the detour path and wherein, when the receiving router receives the Path_Tear Message via only one of the main path and the detour path, the receiving router forwards the received Path_Tear Message downstream without waiting for a timeout.